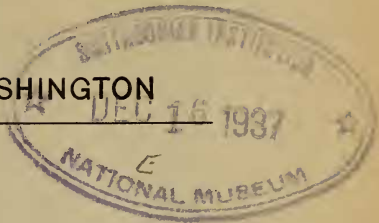


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THE PIGEONS OF THE COLUMBA PLUMBEA GROUP.

BY W. E. CLYDE TODD.

The Pigeons of this group are medium-sized and plainly colored birds, characterized by a small, blackish bill and reddish feet. Their systematic arrangement has always given trouble to ornithologists, and indeed remains to be fully worked out. The present brief paper is offered as a contribution towards this end, and not as a final solution of the problem. It is based wholly on a study of the material in the Carnegie Museum, fifty-six specimens in all, representing eleven different forms.

Salvadori¹ was probably not the first author to discover the puzzling character of this particular group, but his arrangement may be taken as a point of departure. He segregated the three species which he recognized under *Enenas*—a name used here in a subgeneric sense and later raised to generic rank by Ridgway.² But I have come to agree with Dr. C. E. Hellmayr³ and others that there is no practical advantage in splitting the old genus *Columba* into several more or less poorly defined groups. Salvadori admits his inability to discriminate more than three forms of the *plumbea* group on the basis of the material before him—for which he is certainly not to be blamed. Clean, well and uniformly made skins are a virtual necessity in studying Pigeons, if valid conclusions are to be reached. This author was the first to point out the pertinence of the (preoccupied) name *Columba vinacea* Temminck for the bird of Guiana, but he was clearly mistaken in referring *Columba purpureotincta* Ridgway to the same form, and in “lumping” several other names under *C. plumbea*. Ridgway’s tentative arrangement of 1916 covered the entire group as then understood, and was certainly a decided improvement. The latest author to deal with this group is Mr. James L. Peters,⁴ who lists six species and nine additional subspecies, one of which is considered doubtful. In the present paper one new subspecies is described, one form is reduced to subspecific rank, and one name is revived.

¹ Catalogue Birds British Museum, XXI, 1893, 248, 322.
² Bulletin U. S. National Museum, No. 50, VII, 1916, 323.
³ Field Museum Zoological Series, XII, 1929, 462, note.
⁴ Check-List of Birds of the World, III, 1937, 71-73.

Columba plumbea and *C. subvinacea*, the two principal forms of the group, both have an extensive range in tropical America. Their occurrence together in various parts of this area shows that they must represent two distinct specific types. Generally speaking, *C. plumbea* is larger than *C. subvinacea*, its coloration is more bluish, less purplish, and its wings are darker, lacking any trace of the cinnamon color on the inner webs of the remiges that characterizes, in greater or less degree, the latter species. In addition to these two main forms there are two others, *C. goodsoni* and *C. chiriquensis*, possessing a combination of characters which, taken in connection with the facts of their known ranges, necessitate their recognition as species. A third outlying form of wider range, *C. nigrirostris* of Central America, must be placed in the same category. The origin and development of the group as a whole thus constitute a problem in genetics which is worthy of study.

Columba plumbea plumbea and *C. plumbea baeri* have not been examined in the present connection, but judging from descriptions alone seem to be distinct from each other and from the more northern races. Dr. Hellmayr⁵ insists that the *C. locutrix* of Wied is a synonym of the former, but Mr. Peters appears not so sure of this. The lower Amazon Valley, north to Guiana, is occupied by a different race, which must be called

Columba plumbea wallacei Chubb.

This form first appeared in ornithological literature in 1811, when it was described by Temminck and figured by Madame Knip⁶ as *Columba vinacea*, a name unfortunately preoccupied by Gmelin (1788) for an African dove. French Guiana was given as its home, but one looks in vain for further records from that country. Mr. Samuel M. Klages' field-work there in 1917-18, however, resulted in the taking of five specimens, which prove to belong to the same dull-colored race as the birds he collected later on the lower Amazon and the Rio Tapajóz. There is as yet nothing whatever to show that any other form of this group occurs in French Guiana. It is true that von Berlepsch, in his paper on the birds of Cayenne,⁷ lists *C. purpureotincta* from that place, but solely on the authority of Temminck.⁸ Temminck's description, however, obviously refers to the larger species which he called "*vinacea*," and not to the smaller form later characterized as *C. purpureotincta* by Ridgway. It is fair to presume that birds from the three Guianas are the same.

⁵ Novitates Zoologicae, XV, 1908, 91.

⁶ Les Pigeons, I, p. 87, pl. 41.

⁷ Novitates Zoologicae, XV, 1908, 295.

⁸ Von Berlepsch, probably following Salvadori, quotes *Columba cayennensis* Bonaterre (Tableau Encyclopédique et Méthodique, I, 1790, 234, ex Holandre, Abrégé d'Histoire Naturelle, II, 1790, 214) as a doubtful earlier name in this connection. Even Ridgway, in his review of the forms of this group, was thus misled. At the place indicated there is a perfectly accurate and unmistakable description of the Pigeon we have been calling *Columba rufina*, a name first applied by Temminck in 1810, but long antedated by the other. Such a change is indeed regrettable, but this well-known species will have to stand as

Columba cayennensis Bonaterre.

Gibel (Thesaurus Ornithologiae, I, 1872, 741) made this discovery long ago.

In discussing Pará specimens of this Pigeon Dr. Hellmayr⁹ suggested that they might prove to belong to an undescribed form, which Chubb¹⁰ later ventured to separate under the name *wallacei*. Mr. John T. Zimmer,¹¹ however, calls a British Guiana specimen *pallescens*—an allocation inferentially not justified from a study of French Guiana specimens. Mr. Peters relegates *wallacei* to the synonymy of *pallescens* without apparent misgivings. Our series from French Guiana and the lower Amazon (collectively) differs decidedly from four undoubted specimens of *pallescens* from the Rio Purús in the duller, more brownish tone of the upper parts, wings, and tail, and the more vinaceous, less plumbeous cast of the head, neck, upper back, and under parts generally. From *delicata*, which *wallacei* resembles in the color of the upper parts, wings, and tail, the latter differs in its paler underparts, particularly the under tail-coverts. How *wallacei* differs from *baeri* I do not know, not having seen the latter, but it is fair to presume that Dr. Hellmayr would not have overlooked this point. I think, therefore, that we shall have to recognize *wallacei* for the form under discussion.

Twelve specimens: Tamanoir, French Guiana, 2; Pied Saut, Oyapock River, French Guiana, 3; Villa Braga, Rio Tapajóz, Brazil, 4; Obidos, Brazil, 1; Manacapurú, Amazon River, Brazil, 1; Rio Manacapurú, Brazil, 1.

Columba plumbea pallescens Sneath.

The describer of this form had but one male bird, which she compared with *C. p. plumbea* and with *C. "p." bogotensis*. From the description alone I judge it is sufficiently different from the former (from southeastern Brazil). It is of course very different from the latter, which is a race of *C. subvinacea*, but is close to *C. p. delicata*, differing, however, in having the back, wings, and tail more olivaceous, less brownish in tone, while the head and neck have more plumbeous shading; the under parts average slightly paler.

Four specimens: Hyutanahan, Rio Purús, Brazil, 1; Arimã, Rio Purús, Brazil, 3.

Columba plumbea delicata von Berlepsch and Stolzmann.

I can not find any differences between specimens from Colombia, Bolivia, and Venezuela. As above remarked, this race appears most closely allied to *pallescens*.

Five specimens: El Cauca, Colombia, 2; Cerro Hosane, Bolivia, 2; La Azulita, Venezuela, 1.

Columba plumbea chapmani (Ridgway) is another form which is autotypically unknown to me.

Columba subvinacea recondita, subsp. nov.

Type.—No. 74,472, Collection Carnegie Museum, adult male; Colonia do Mojuy, Santarem, Brazil, October 25, 1919; Samuel M. Klages. Wing, 156; tail, 117; bill, 11.5; tarsus, 20.

⁹ Novitates Zoologicae, XIII, 1906, 383.

¹⁰ Bulletin British Ornithologists' Club, XXXVIII, 1917, 32.

¹¹ Field Museum Zoological Series, XVII, 1930, 256.

Subspecific characters.—Similar in general to *Columba subvinacea bogotensis* (von Berlepsch and Leverkühn) of the Andean region (Colombia to Bolivia), but upper parts, wings (above), and tail darker, more olivaceous, less brownish rufescent, and wings underneath less cinnamomeous.

Range.—The Amazon Valley, west (at least on the south) to the Rio Purús.

Remarks.—This is the *Columba purpureotincta* of Sneath, ¹² but not of Ridgway, 1888. Of the latter we have a perfectly typical specimen from eastern Venezuela, identified by Ridgway himself. From this form *recondita* differs in its somewhat larger size, darker-colored back, wings, and tail, and in having the wings underneath less decidedly cinnamomeous. In *recondita* the wings externally are mummy brown; in *bogotensis* they are raw umber to Brussels brown, while the upper parts in general correspond. The under parts are colored about the same in *purpureotincta*, *recondita*, and *bogotensis*. So far as color characters are concerned, there is a perfect gradation from *peninsularis* of northern Venezuela through *purpureotincta* to *recondita*. I believe all three should be regarded as conspecific. The present race has nothing to do with *C. plumbea*, with races of which it occurs together on the lower Amazon as well as on the Rio Purús. Specimens of *recondita* from the latter locality are a little larger and darker than those from the lower Amazon, but are not different enough to deserve a special name.

Thirteen specimens: Colonia do Mojuy, Santarem, Brazil, 1; Villa Braga, Rio Tapajóz, Brazil, 2; Obidos, Brazil, 3; Hyutanahan, Rio Purús, Brazil, 1; Nova Olinda, Rio Purús, Brazil, 3; Arimã, Rio Purús, Brazil, 3.

Columba subvinacea purpureotincta Ridgway.

Our single specimen (handled and identified by Ridgway himself) comes from a locality in Venezuela close to the Guiana frontier, and may be considered as typical. The form proves to be so exactly intermediate in its color characters between *peninsularis* on the one hand and the new form *recondita* on the other that the only course open is to consider all three conspecies. In size the present race is the smallest of the three.

Mr. Klages did not obtain this form in French Guiana, nor did Mr. George K. Cherrie. As already explained, its ascription to that country rests solely on an erroneous identification of Temminck's *Columba vinacea*. But in British Guiana it appears to be not uncommon.

One specimen: Rio Yuruan, Venezuela.

Columba subvinacea peninsularis Chapman.

This seems to be a small, pale race of *subvinacea*, as compared with *zuliae*. Our specimens may possibly be not entirely typical, and require comparison.

Three specimens: San Rafael (near Cumanacoa), Venezuela.

Columba subvinacea zuliae Cory.

Cory compared his new form with *berlepschi* instead of with *bogotensis*, to which it is more closely allied genetically and geographically. Since his

¹² Boletim Museu Goeldi, VIII, 1914, 62.

paper appeared earlier, he was not aware of Dr. Chapman's results at the time. I refer our specimens to *zulia* on geographical grounds, but the only characters I can find to separate them from *bogotensis* are their slightly darker general coloration and in particular their deeper cinnamon under wing-coverts and underside of the wings. They come from a locality in the Upper Tropical Zone.

Two specimens: Santa Lucia, Miranda, Venezuela.

Columba subvinacea bogotensis (von Berlepsch and Leverkühn).

Dr. Frank M. Champan¹³ has very clearly shown that this form is a race of *subvinacea* instead of *plumbea*, as originally described. I fully agree with his conclusions after a study of our series, although unfortunately I have no specimens of *berlepschi* for comparison, and only one of true *subvinacea*. Our Colombian specimens are all from the Subtropical Zone, while those from Bolivia are from the Tropical; notwithstanding which circumstance no racial differences are obvious.

Twelve specimens: Rio Surutu, Bolivia, 3; Rio Yapacani, Bolivia, 1; Buenavista, Bolivia, 3; Las Ventanas, Colombia, 5.

Columba subvinacea subvinacea (Lawrence).

This form closely resembles *C. nigrirostris*, from which it differs in its more purplish (instead of olive brown) upper parts and relatively longer tail. The underside of the wing is more decidedly and extensively cinnamon. In its range this is more a bird of the Subtropical Zone. The two forms are clearly different species.

One specimen: Ujuras de Terraba, Costa Rica.

I am unable to discuss *Columba subvinacea berlepschi* Hartert for lack of material.

Columba goodsoni Hartert.

Our specimens correspond closely to the original description, and illustrate as well Dr. Hellmayr's later comments.¹⁴ So far as I can see there is no ground for associating this form with any of its neighbors in a conspecific sense; the combination of characters it possesses entitles it to stand alone. It has the plumbeous head and breast of *C. plumbea* together with the rufescent wings of *C. subvinacea*, but is in no sense a connectant between these two.

Three specimens: Malagita, Chocó, Colombia.

Columba nigrirostris Sclater.

Costa Rican and British Honduras birds are the same in my opinion. Some of the latter, indeed, show a decided rusty brown tinge to the recrices below, which feature, however, seems to be purely individual and is carried to an extreme in the type of *C. nigrirostris brunneicauda* Carriker. The exact shade and intensity of coloration varies in birds from both countries.

¹³ Bulletin American Museum Natural History, XXXVI, 1917, 204.

¹⁴ Proceedings Zoological Society of London, 1911, 205.

Since this form is properly one of the Tropical Zone, its range impinges upon that of *C. subvinacea subvinacea* in Costa Rica only to a limited extent—despite Mr. Carriker's intimation. It is clearly a species distinct from *subvinacea*. It is also isolated geographically and by color characters from any of the South American forms of this group—valid reasons why it should continue to stand as a full species.

Ten specimens: Pozo Azul de Pirris, Costa Rica, 1; Guapiles, Costa Rica, 1; Boruca, Costa Rica, 1; El Hogar, Costa Rica, 1; Manatee Lagoon, British Honduras, 6.

Columba chiriquensis (Ridgway), the only remaining form of this group, I have not seen.